

### ***REMARKS***

This is a full and timely response to the non-final Office Action of June 1, 2006. Reconsideration and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Response, claims 1 and 2-28 are pending in this application. Claims 1 and 12 have been amended. Claims 2-4 are canceled. Claims 21-28 are newly added. The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims. Applicants believe that no new matter has been added by the amendments and that a new search is not necessary.

### ***DRAWINGS***

FIGS. 1 and 2 have been corrected consistent with the instructions provided by the Office Action. Replacement sheets for FIGS. 1 and 2 are included in the Appendix.

### ***SPECIFICATION***

Paragraph 32 on page 8 has been corrected consistent with the instructions provided by the Office Action.

## **CLAIMS**

### **Claim 1**

Claim 1 is rejected under 35 U.S.C. § 102 (b) and 102(e) as purportedly being anticipated by Miyamoto et. al. (EP 1172224 A1), Nigam (U.S. Patent 6,291,023), and Nigam (U.S. Patent Application 20030219539). Amended claim 1 reads as follows:

A print medium, comprising:

a substrate having a fibrous component, wherein a cationic guanidine polymer compound or salt thereof and a metallic salt are each disposed within the fibrous component of the substrate, wherein ***the metallic salt is selected from sodium chloride, aluminum chloride, calcium chloride, calcium nitrate, and magnesium chloride.***

(Emphasis added). Applicants traverse each of the 102 rejections in the Office Action and submit that the rejection of claim 1 under 35 U.S.C. §102 by Miyamoto, Nigam, and Nigam should be withdrawn because each, separately or in combination, do not teach, disclose, or suggest each and every feature of amended claim 1 above. Claim 1 has been amended to include the features in claim 4, which was rejected under a §103 rejection using each of the references above in view of Sumioka et al (U.S. Patent Application 20020140796).

In order for a claim to be properly rejected under 35 U.S.C. §103, the teachings of the cited art reference must suggest all features of the claimed invention to one of ordinary skill in the art. *See, e.g., In re Dow Chemical*, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988); *In re Keller*, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). Further, “[t]he PTO has the burden under section 103 to establish a prima facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the cited art or that knowledge generally available to one of

ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

In order to establish the *prima facie* case of obviousness, the Examiner must establish a suggestion or motivation either in the references themselves, or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine reference teachings in order to result in the claimed invention. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

In this regard, Applicants note that there must not only be a suggestion to combine the functional or operational aspects of the combined references, but that the Federal Circuit also requires the prior art to suggest **both** the combination of elements **and** the structure resulting from the combination. *Stiftung v. Renishaw PLC*, 945 Fed.2d 1173 (Fed. Cir. 1991). Therefore, in order to sustain an obviousness rejection based upon a combination of these two prior art references, the prior art must properly suggest the desirability in the references themselves for combining the particular elements.

Miyamoto, Nigam, and Nigam each discuss polyguanidine compounds and inorganic pigments. In contrast, Sumioka teaches an ink-receptive layer, and does not teach dispersing the components within the fibrous component of the substrate. In addition, Sumioka teaches a combination of hydrazine, a cationic polymer, a metallic compound, and fumed silica, all of which are only in the ink-receptive layer. The Office Action states that the four references are analogous art, but the chemistry described in Sumioka is more complex than each of Miyamoto, Nigam, and Nigam because Sumioka includes the chemistry of numerous polymers and the fumed silica to achieve the results described therein. The Office Action has not provided an objective teaching in the cited art or that knowledge generally available to one of ordinary skill in the art would lead

that individual to combine the relevant teachings of the references. One skilled in the art would not generally understand the complex chemistry and chemical interactions of each of Miyamoto, Nigam, Nigam, and Sumioka and be able to determine that the chemistry of all of the components in Sumioka is similar to that of each of Miyamoto, Nigam, and Nigam. Due to the unpredictable nature of many chemicals, one of ordinary skill in the art can not presume that the interactions of the combination of hydrazine, a cationic polymer, metallic compound, and fumed silica in Sumioka are analogous to the reactions of the polyguanidine compounds and inorganic pigments in Miyamoto, Nigam, and Nigam. Thus, since the Office has not satisfied prima facie case of obviousness. Therefore, the rejection of claim 1 should be withdrawn.

#### **Claims 5-11 and 21-24**

Applicants traverse all of the §102 and 103 rejections in the Office Action. Applicants respectfully submit that pending dependent claims 5-11 and 21-24 include every feature of independent claim 1 and that the cited references fail to teach, disclose, or suggest at least the features of claim 1. Thus, pending dependent claims 5-11 and 21-24 are also allowable over the prior art of record. In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Notwithstanding the previous reasons for allowance, Applicants submit that the cited references, in particular, Miyamoto, Nigam, Nigam, and Sumioka, individually or in combination, do not disclose, teach, or suggest “the cationic guanidine polymer compound or salt thereof includes at least one unit described by structural formula (VII)....,” as claimed in claim 21. Therefore, claim 21 is allowable over the prior art of record.

## Claim 12

Claim 12 is rejected under 35 U.S.C. § 102(b) and 102(e) as purportedly being anticipated by Miyamoto et. al. (EP 1172224 A1), Nigam (U.S. Patent 6,291,023), and Nigam (U.S. Patent Application 20030219539). Amended claim 12 reads as follows:

A method of forming print media, comprising:  
    providing a fibrous component including a plurality of fibers;  
    providing a cationic guanidine polymer compound or salt thereof and a metallic salt;  
    introducing the cationic guanidine polymer compound or salt thereof and the metallic salt to the fibrous component;  
    mixing the cationic guanidine polymer compound or salt thereof and the metallic salt with the fibrous component, wherein the cationic guanidine polymer compound or salt thereof and the metallic salt are disposed within the fibers of the fibrous component, wherein *the metallic salt is selected from sodium chloride, aluminum chloride, calcium chloride, calcium nitrate, and magnesium chloride*; and  
    forming a substrate including the cationic guanidine polymer compound or salt thereof and the metallic salt disposed with the fibers of the fibrous component.

(Emphasis added). Applicants traverse each of the 102 rejections in the Office Action and submit that the rejection of claim 12 under 35 U.S.C. §102 by Miyamoto, Nigam, and Nigam should be withdrawn because each, separately or in combination, do not teach, disclose, or suggest each and every feature of amended claim 12 above. In particular, Miyamoto, Nigam, and Nigam each do not teach, disclose or suggest that “the metallic salt is selected from sodium chloride, aluminum chloride, calcium chloride, calcium nitrate, and magnesium chloride,” as recited in amended claim 12. Therefore, the rejection of claim 12 should be withdrawn.

## **Claims 12-20 and 25-28**

Applicants traverse all of the §102 rejections in the Office Action. Applicants respectfully submit that pending dependent claims 12-20 and 25-28 include every feature of independent claim 12 and that the cited references fail to teach, disclose, or suggest at least the features of claim 12. Thus, pending dependent claims 12-20 and 25-28 are also allowable over the prior art of record. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988).

Notwithstanding the previous reasons for allowance, Applicants submit that the cited references, in particular, Miyamoto, Nigam, Nigam, and Sumioka, individually or in combination, do not disclose, teach, or suggest “the cationic guanidine polymer compound or salt thereof includes at least one unit described by structural formula (VII). . . .,” as claimed in claim 25. Therefore, claim 25 is allowable over the prior art of record.

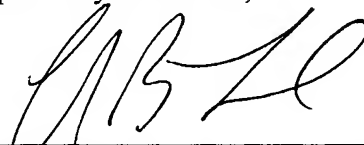
### **Conclusion**

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested.

In addition, any other statements in the Office Action that are not explicitly addressed herein are not intended to be admitted. In addition, any and all findings of inherency are traversed as not having been shown to be necessarily present. Furthermore, any and all findings of well-known art and official notice, or statements interpreted similarly, should not be considered well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to support such conclusions.

If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'CBL', is written over a horizontal line.

**Christopher B. Linder, Reg. No. 47,751**



## CERTIFICATE OF MAILING

I hereby certify that the below listed items are being deposited with the U.S. Postal Service as first class mail in an envelope addressed to:

**Mail Stop Amendment**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**

on 9/11/06

Sara Rogers  
Sara A. Rogers

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of: Stoffel, et al.

Confirmation No.: 1498

Serial No.: 10/817,141

Examiner: Cordray, Dennis R.

Filed: 4/2/04

Docket No. 200400537-1

TKHR: 050835-1050

For: Print Media and Methods of Making Print Media

The following is a list of documents enclosed:

Return Postcard  
Amendment  
Amendment Transmittal Sheet  
Replacement Drawings